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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/697,054

10/31/2003

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EXAMINER

HALL, ARTHUR O

ART UNIT

PAPER NUMBER

3714

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/697,054	Applicant(s) EMORI ET AL.	
	Examiner ARTHUR O. HALL	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-7,9-11 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-7,9-11 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Examiner acknowledges applicants amendment of claims 1, 4, 7 and 10-11, cancellation of claims 2-3, 8 and 12-14 and addition of claim 15 in the Response dated 5/27/2008 directed to the Non-final Office Action dated 2/28/2008. Claims 1, 4-7, 9-11 and 15 are pending in the application and subject to examination as part of this office action.

Examiner acknowledges that applicants arguments in the Response dated 5/27/2008 directed to the rejection set forth under 35 U.S.C. 103(a) in the Non-final Office Action dated 2/28/2008 are deemed moot in light of a new ground of rejection under 35 U.S.C. 103(a) as set forth below in view of applicants amendments and in view of applicants arguments. However, Examiner deems applicants' arguments with respect to lack of motivation for conceiving the recited reflection film unpersuasive in light of Muir et al. (US Patent Application Publication 2005/0192090; hereinafter Muir) and Ozaki et al. (US Patent Application Publication 2001/0031658; hereinafter Ozaki) as described below.

Examiner acknowledges applicants cancellation of claim 14 directed to Examiners objection of claim 14 set forth in the Non-final Office Action dated 2/28/2008, which obviates the objection to the claim. Therefore, Examiner withdraws further objection to the claim. However, amendments of claim 11 causes Examiner to set forth a new ground of objection to claim 11 as set forth below.

Claim Objections

Claim 11 is objected to because of the following informalities: the claim recites "and function" after the "wherein" clause; however, this term is not in proper grammatical form. Examiner believes that applicants recited the term "and" in the claim in error. Appropriate correction is required.

Claim Rejections - 35 USC § 103

Examiner sets forth new grounds of rejection under 35 U.S.C. § 103(a) with respect to amended or new features as described below because each of the features of applicants claimed invention as amended or newly added continues to be unpatentable or obvious over the prior art.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 4-7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muir et al. (US Patent Application Publication 2005/0192090; hereinafter Muir) in view of Ozaki et al. (US Patent Application Publication 2001/0031658; hereinafter Ozaki), and further in view of Inoue (US Patent 7,214,132).

Regarding claims 1 and 7, Muir teaches
a gaming machine (paragraph 0040 and Fig. 1, 10, Muir) comprises:
a game result display device for displaying a game result thereon (paragraphs 0041, 0048 and 0058 and Fig. 8, 14, 68, Muir; a display includes reels and an LCD

having an LCD monitor provided for displaying plural symbols that determine winning or non-winning symbol combinations); and

a beneficial state generating device for generating a beneficial state for a player when a predetermined game result is displayed on the game result display device (paragraph 0045, Muir; a processor determines when to stop the display of symbols upon generation of a winning or non-winning combination of symbols to be displayed on the display);

wherein the game result display device includes

a first display device having a plurality of symbol display parts capable of variably displaying and stopping plural symbols, each of the symbol display parts having light transmittance, **or in other words**, a plurality of mechanical reels each of which has a reel sheet having light transmittance and plural symbols formed thereon (paragraph 0056 and Fig. 8, 18, Muir; a symbol carrying arrangement has reels with plural patterns or symbols disposed thereon) and

a second display device arranged in front of the first display device when seen from a front side of the gaming machine, the second display device being from a liquid crystal display device including a liquid crystal panel, **or in other words**, a liquid crystal display device arranged in front of the reels, the liquid crystal display device having light transmitting areas each of which is disposed corresponding to each reel to see the symbols (paragraphs 0058 and 0061, Fig. 8, 68 and 76, Muir; a LCD includes LCD monitor disposed in front of the reels, a liquid crystal panel/shutter mechanism and a transparent panel/light guide plate that in combination superimpose or display images of the LCD monitor over images displayed on the reels),

a light guide device constructed from a transparent acrylic resin plate, the light guide device being arranged at a rear side of the liquid crystal panel, **or in other words**, a light guide plate constructed from a transparent acrylic resin plate arranged between the liquid crystal panel and the second illumination device (paragraph 0066 and Fig. 8, 84, Muir; a transparent panel or light guide plate is made of synthetic plastic material and acrylic resin is a type of synthetic plastic material), and

individual illumination devices arranged at side edges of the transparent acrylic resin plate of the light guide device for guiding light to the light guide device, **or in other words**, third illumination devices arranged at side edges of the transparent acrylic resin plate of the light guide plate for guiding light to the light guide plate (paragraph 0066 and Fig. 8, 86, Muir; illuminating elements or individual/third illumination devices are disposed at the ends or side edges of a transparent panel to draw light off of the reels and into the transparent panel).

However, Muir does not appear to teach a reflection plate as claimed. Therefore, attention is directed to Ozaki, which teaches

a reflection film for reflecting the light guided to the light guide device, **or in other words**, a reflection film arranged between the light guide plate described above and the second illumination device described below (paragraphs 0045 and 0138 and Fig. 28, 9, 25 and 24, Ozaki; a reflection plate or film is disclosed as being disposed between a light source and LCD Device that includes a transparent EL panel or light guide plate),

the reflection film having light transmission areas each of which corresponds to each of the symbol display parts to see and recognize the symbols displayed on each symbol display part and a light reflection area formed around the light transmission areas to reflect the light from the light guide device toward the liquid crystal panel which is arranged so as to cover not only the light transmission areas but also the light reflection area (paragraphs 0045 and 0138 and Fig. 28, 25, Ozaki; it would have been obvious at the time of invention to try an implementation in which the reflection plate or film includes openings (Fig. 8, 64, Muir) or light transmission areas that allow light to be transmitted to the reels for viewing symbols thereon as disclosed by Muir and a recessed region (Fig. 8, 66, Muir) or light reflection area formed around the openings as disclosed by Muir that is formed from the reflection plate for reflecting light disclosed by Ozaki since the shutter or liquid crystal panel disclosed in Muir is configured to cover the openings and recessed region, since one having ordinary skill in the art would have known that the recessed region of the monitor housing has reflective properties

because the recessed region is commonly made from metal that would reflect light back toward the shutter similar to the function of the reflection plate, and because no other features of the reflection film are recited that further define over any structural features disclosed by Muir and Ozaki),

wherein a common illumination device is provided, the common illumination device including a front illumination device for illuminating the first display device from a front side thereof and the liquid crystal panel from a rear side thereof, **or in other words**, a second illumination device arranged between the reels and the liquid crystal display device, wherein the second illumination device illuminates the symbols on the reel sheets from front sides of the reels and the liquid crystal display device (paragraphs 0113 and 0138 and Figs. 17, 27 and 28, 9, Ozaki; a fluorescent lamp or second illumination device, arranged between the transparent LCD device and rotational reel display device, illuminates the symbols disposed on the reels from the front side of the reels).

All of the features or components required to obtain a display and common illumination device including a front illumination device are known in Muir and Ozaki. The only difference is the combination of the “old elements” into a single device through mounting a light source and reflection plate external to the reels along with other display features described above that are mounted external to the reels that would produce the reflective properties required to provide sufficient light to the liquid crystal panel or shutter so that images on the shutter are clearly viewable and obtain light for the reels and LCD monitor so as to allow an image displayed on the reels to be superimposed over an image displayed on the LCD monitor.

Thus, it would have been obvious to one having ordinary skill in the art at the time applicants' invention was made to arrange the light source above the reflective

plate disposed external to the reels as taught by Ozaki in alignment with the LCD monitor, transparent panel and shutter as taught by Muir because the alignment is not dependent on any particular structural change to functionally ensure that the light reflected off of the reels and directed through the reflective plate via the light source passes through to the shutter, transparent panel and LCD monitor in order for the symbols to be displayed to the player.

Further, Muir alone or in combination with Ozaki does not appear to teach a common illumination device including rear or first illumination device features as claimed.

Therefore, attention is directed to Inoue, which teaches the common illumination device includes a rear illumination device arranged within the first display device for illuminating the first display device from a rear side thereof and the liquid crystal panel by light passed through the symbol display parts, **or in other words**, a first illumination device arranged within each reel, wherein the first illumination device illuminates the symbols on the reel sheets from rear sides of the reels and the light transmitting areas on the liquid crystal display device by light passed through the reel sheets (column 4, lines 8-18, Fig. 2, 27-29 and Fig. 3, Inoue; plural light or LED sources or rear/first illumination devices configured in 3x3 array or matrix form are disposed within each reel to transmit light from the rear past the symbols disposed on the surface of the reels).

All of the features or components required to obtain a display and common illumination device including a front and rear illumination devices are known in Muir, Ozaki and Inoue. The only difference is the combination of the “old elements” into a

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single device through mounting plural light or LED sources internal to the reels along with other display features described above that are mounted external to the reels that would allow the light guide plate to disperse light evenly over the entire surface of the liquid crystal panel or shutter to prevent the image tone shown in the shutter from being visually different when displayed over the shutter surface.

Thus, it would have been obvious to one having ordinary skill in the art at the time applicants' invention was made to arrange the light or LED sources disposed internal to the reels as taught by Inoue in alignment with the light source, reflective plate, LCD monitor, transparent panel and shutter as taught by Muir and Ozaki because the alignment is not dependent on any particular structural change to functionally ensure that the light transmitted through the reels and directed through the reflective plate via the light or LED sources passes through to the shutter, transparent panel and LCD monitor in order for the symbols to be displayed to the player.

Regarding claims 5-6 and 9-11, Ozaki teaches

Regarding claim 5,

a game start instruction device is operable by a player (paragraphs 0113, Ozaki; stop switches are operated by a player);

a game internal winning combination determination device determines an internal winning combination based on an output from the game start instruction device (paragraphs 0071-0073 and 0113, Ozaki; a CPU or processor determines the winning combination); and

a game result display control device conducts display control of the game result display device based on a determined result by the internal winning combination

determination device (paragraphs 0063-0064, 0071-0073 and 0113, Ozaki; a processor controls display of the game result or match or outcome of symbols combinations based on a win condition);

wherein the game result display control device turns off all illumination devices included in the common illumination device in a case that the internal winning combination determination device determines a predetermined combination as the internal winning combination (paragraphs 0071-0073 and 0136, Ozaki; on-off control by a processor for luminescence of the LCD device is provided based on winning combinations of symbols).

Regarding claim 6, the illumination device included in the common illumination device is able to variably display the symbols (paragraph 0071, Ozaki; variable display of patterns or symbols is provided based on illumination of symbols for a winning or no-winning condition).

Regarding claims 9 and 10,

a processor controls the reels, the first illumination device and the second illumination device **or** the first illumination device, the second illumination device and the third illumination device (paragraphs 0063-0064, 0071-0073, 0113, Ozaki; it would have been obvious at the time of invention to include a light source disposed within the reels for the same reasons described above);

wherein the processor selects the symbols to be stopped and displayed, determines based on the selected symbols whether or not a symbol combination is won and stops the reels (paragraphs 0063-0064, 0071-0073 and 0113, Ozaki; a stop pattern selection means is disclosed), and

wherein the processor turns off at least one of the first illumination device and the second illumination device **or** the first illumination device, the second illumination device and the third illumination device if the processor determines that the symbol combination is won (paragraphs 0063-0064, 0071-0073 and 0136, Ozaki; it would have been obvious at the time of invention to include a light source disposed within the reels

for the same reasons described above).

Regarding claim 11,

the first illumination device and the second illumination device function as an illumination device to illuminate the symbols on the reel sheets if liquid crystal in the light transmitting areas of the liquid crystal display device is not driven (paragraph 0074, Ozaki; if a winning combination is “not” displayed, patterns symbols are displayed by the transparent EL panels via plural light sources and it would have been obvious at the time of invention to include a light source disposed within the reels for the same reasons described above), and

the first illumination device and the second illumination device function as an illumination device to illuminate the liquid crystal display device if the liquid crystal in the light transmitting areas of the liquid crystal display device is driven (paragraphs 0078-0079, Ozaki; if a winning combination is displayed, patterns symbols are displayed by the transparent EL panels via plural light sources and it would have been obvious at the time of invention to include a light source disposed within the reels for the same reasons described above).

The claimed features of claim 4 do not appear to be disclosed in Muir alone or in combination with Ozaki; therefore, attention is directed to Inoue, which teaches the liquid crystal panel is set to normally white (column 6, lines 19-32, column 6, line 59 to column 7, line 13 and column 7, lines 25-33, Inoue; a white light is normally emitted from all colored LEDs when symbols are stopped on winning lines and it would have been obvious at the time of invention to try an implementation in which the liquid crystal panel or shutter would allow emission of white light as a normal or standard setting since the shutter is configured to allow or disallow light, which is normally white, for images displayed on reels to be revealed to the player).

Claims 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muir in view of Ozaki, further in view of Inoue, and even further in view of Takahara (US Patent 6,992,718). Features are described by figures with reference characters where necessary for clarity.

Muir alone or in combination with Ozaki and Inoue teaches features of the claimed invention as described above.

However, Muir alone or in combination with Ozaki and Inoue does not appear to teach a base film included in the reflection film and a light reflection area formed from a silver layer deposit on the base film as claimed. Therefore, attention is directed to Takahara, which teaches

Regarding claim 15, the reflection film has a base film, and the light reflection area is formed by depositing a silver layer on the base film (column 29, lines 10-19, column 38, line 65 to column 39, line 23, column 46, lines 62-67, Figs. 34 and 48, 341 and Fig. 35(b), C, Takahara; it is disclosed that a thin film or base film is formed on a reflecting film for preventing oxidization, and that the reflective film is also formed by depositing silver or other reflective materials onto a surface, and it would have been obvious at the time of invention to try an implementation in which the silver is deposited over the thin film to form the reflecting film since one having ordinary skill in the art would have understood that the thin film for preventing oxidation may be applied to a surface or formed from metal first and that the silver would be applied to the thin film so as to be the outside coating/surface for providing reflection of light).

Takahara suggests that a device that provides a liquid crystal display panel of a viewfinder for user viewing that resolves the inefficiency of lowered light utilization by increasing the illuminating power for backlighting via improvement of light reflection so as to optimize light diffusion and light transmittance, thereby reducing light emission causing uneven luminance that deteriorates display quality (column 1, lines 28-40 and column 1, line 63 to column 2, line 9, Takahara).

Thus, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to modify Muir in view of the teachings of Ozaki, further in view of the teachings of Inoue, and even further in view of the teachings of Takahara for the purpose of exchanging the interchangeable reflection plate features or upgrading the reflection plate features disclosed by Muir alone or in combination with Ozaki and Inoue with the thin film and silver deposition features disclosed by Takahara in order to improve the efficiency of lowered light utilization by increasing the illuminating power for backlighting via improvement of light reflection so as to optimize light diffusion and light transmittance, and thus, reduce light emission causing uneven luminance that deteriorates display quality.

Response to Arguments

Applicants arguments filed in the Response dated 5/27/2008 directed to the Examiners' rejection under 35 U.S.C. § 103(a) have been considered fully and are moot in light of a new ground of rejection under 35 U.S.C. 103(a) as set forth above in view of applicants amendments and in view of applicants arguments thereof.

Regarding applicants' arguments and amendments concerning claims 1, 4-7, 9-11 and 15 rejected as unpatentable or obvious under 35 U.S.C. § 103(a):

Applicants argue that there is no motivation for conceiving the newly recited reflection from the combination of Muir, Ozaki and Inoue. Examiner submits that since the shutter or liquid crystal panel disclosed in Muir is configured to cover the openings and recessed region, since one having ordinary skill in the art would have known that the recessed region of the monitor housing has reflective properties because the recessed region is commonly made from metal that would reflect light back toward the shutter similar to the function of the reflection plate, and because no other features of the reflection film are recited that further define over any structural features disclosed by Muir and Ozaki, it would have been obvious to one having ordinary skill in the art at the time of invention to provide the reflection plate or film with openings (Fig. 8, 64, Muir) or light transmission areas that allows light to be transmitted to the reels for viewing symbols thereon as disclosed by Muir and a recessed region (Fig. 8, 66, Muir) or light reflection area formed around the openings as disclosed by Muir that is formed from the reflection plate for reflecting light disclosed by Ozaki (paragraphs 0045 and 0138 and Fig. 28, 25, Ozaki).

Examiner has provided the above new grounds of rejection of the claims under 35 U.S.C. 103(a) because each of the features of applicants claimed invention continues to be unpatentable or obvious over the prior art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

B US-6,525,707 B1, Kaneko et al.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARTHUR O. HALL whose telephone number is (571)270-1814. The examiner can normally be reached on Mon - Fri, 8:00am - 5:00 pm, Alt Fri, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. O. H./
Examiner, Art Unit 3714

/Scott E. Jones/
Primary Examiner, Art Unit 3714